

9



R4/09

RAW SEQUENCE LISTING

DATE: 08/26/2002

PATENT APPLICATION: US/09/831,088A

TIME: 14:36:51

Input Set : A:\pf0622usn_seqlist.txt

Output Set: N:\CRF3\08262002\I831088A.raw

4 <110> APPLICANT: INCYTE PHARMACEUTICALS, INC.
 5 TANG, Y. Tom
 6 CORLEY, Neil C.
 7 GUEGLER, Karl J.
 8 GORGONE, Gina A.
 9 AZIMZAI, Yalda
 10 KASER, Matthew R.
 11 YUE, Henry
 13 <120> TITLE OF INVENTION: COENZYME A-UTILIZING ENZYMES
 15 <130> FILE REFERENCE: PF-0622 PCT
 C--> 17 <140> CURRENT APPLICATION NUMBER: US/09/831,088A
 C--> 18 <141> CURRENT FILING DATE: 2002-08-26
 20 <150> PRIOR APPLICATION NUMBER: 09/185,217; unassigned
 W--> 21 <151> PRIOR FILING DATE: 1998-11-03; 1998-11-03
 23 <160> NUMBER OF SEQ ID NOS: 10
 25 <170> SOFTWARE: PERL Program
 27 <210> SEQ ID NO: 1
 28 <211> LENGTH: 100
 29 <212> TYPE: PRT
 30 <213> ORGANISM: Homo sapiens
 32 <220> FEATURE:
 33 <221> NAME/KEY: misc_feature
 34 <223> OTHER INFORMATION: Incyte ID No: 1580751CD1
 36 <400> SEQUENCE: 1
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 38 1 5 10 15
 39 Asn Val His Glu Lys Lys Leu Gly Asp Lys Val Ala Phe Tyr Trp
 40 20 25 30
 41 Pro Cys Gln Arg Asp Gln Asp Gly Tyr Tyr Trp Ile Thr Gly Arg
 42 35 40 45
 43 Ile Asp Asp Met Leu Asn Val Ser Gly Glu Gly Gln Gly Pro Pro
 44 50 55 60
 45 Ser His Leu Ile Asn Ser Ala Pro Leu Thr Thr Pro Ser Arg Ser
 46 65 70 75
 47 Leu Pro Gln Glu Pro Arg Ser Val Leu Trp Pro Asp His Val Leu
 48 80 85 90
 49 Ser Val Ala Phe Ser Ser Gly Pro Arg Phe
 50 95 100
 54 <210> SEQ ID NO: 2
 55 <211> LENGTH: 159
 56 <212> TYPE: PRT
 57 <213> ORGANISM: Homo sapiens
 59 <220> FEATURE:

f6
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60 <221> NAME/KEY: misc_feature
61 <223> OTHER INFORMATION: Incyte ID No: 1627889CD1
63 <400> SEQUENCE: 2
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66 Val Ser Arg Phe Leu His Leu Gln Ser Pro Phe Leu Thr Gln Val
67           20           25           30
68 His Ser Glu Gln Trp Gln Leu Ser Thr Ser Gln Ile Pro Val Gln
69           35           40           45
70 Gln Met His Leu Phe Asp Val His Asn Tyr Pro Asp Tyr Val Ser
71           50           55           60
72 Ser Gly Gly Gly Phe Gly Pro Ala Asp Asp His Gly Tyr Gly Val
73           65           70           75
74 Ser Tyr Ile Phe Met Gly Asp Gly Met Ile Thr Phe His Ile Ser
75           80           85           90
76 Ser Lys Lys Ser Ser Thr Lys Thr Asp Ser His Arg Leu Gly Gln
77           95          100          105
78 His Ile Glu Asp Ala Leu Leu Asp Val Ala Ser Leu Phe Gln Ala
79          110          115          120
80 Gly Gln His Phe Lys Arg Arg Phe Arg Gly Ser Gly Lys Glu Asn
81          125          130          135
82 Ser Arg His Arg Cys Gly Phe Leu Ser Arg Gln Thr Gly Ala Ser
83          140          145          150
84 Lys Ala Ser Met Thr Ser Thr Asp Phe
85          155
88 <210> SEQ ID NO: 3
89 <211> LENGTH: 215
90 <212> TYPE: PRT
91 <213> ORGANISM: Homo sapiens
93 <220> FEATURE:
94 <221> NAME/KEY: misc_feature
95 <223> OTHER INFORMATION: Incyte ID No: 1965888CD1
97 <400> SEQUENCE: 3
98 Met Asn Arg Pro Ser Ala Arg Asn Ala Leu Gly Asn Val Phe Val
99   1           5           10           15
100 Ser Glu Leu Leu Glu Thr Leu Ala Gln Leu Arg Glu Asp Arg Gln
101           20           25           30
102 Val Arg Val Leu Leu Phe Arg Ser Gly Val Lys Gly Val Phe Cys
103           35           40           45
104 Ala Gly Ala Asp Leu Lys Glu Arg Glu Gln Met Ser Glu Ala Glu
105           50           55           60
106 Val Gly Val Phe Val Gln Arg Leu Arg Gly Leu Met Asn Asp Ile
107           65           70           75
108 Ala Ser Ser Ala Val Met Gly Leu Ile Glu Thr Thr Arg Gly Leu
109           80           85           90
110 Leu Pro Gly Ala Gly Gly Thr Gln Arg Leu Pro Arg Cys Leu Gly
111           95          100          105
112 Val Ala Leu Ala Lys Glu Leu Ile Phe Thr Gly Arg Arg Leu Ser
113          110          115          120

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114 Gly Thr Glu Ala His Val Leu Gly Leu Val Asn His Ala Val Ala
115                      125                      130                      135
116 Gln Asn Glu Glu Gly Asp Ala Ala Tyr Gln Arg Ala Arg Ala Leu
117                      140                      145                      150
118 Ala Gln Glu Ile Leu Pro Gln Ala Pro Ile Ala Val Arg Leu Gly
119                      155                      160                      165
120 Lys Val Ala Ile Asp Arg Gly Thr Glu Val Asp Ile Ala Ser Gly
121                      170                      175                      180
122 Met Ala Ile Glu Gly Met Cys Tyr Ala Gln Asn Ile Pro Thr Arg
123                      185                      190                      195
124 Asp Arg Leu Glu Gly Met Ala Ala Phe Arg Glu Lys Arg Thr Pro
125                      200                      205                      210
126 Lys Phe Val Gly Lys
127                      215
130 <210> SEQ ID NO: 4
131 <211> LENGTH: 720
132 <212> TYPE: PRT
133 <213> ORGANISM: Homo sapiens
135 <220> FEATURE:
136 <221> NAME/KEY: misc_feature
137 <223> OTHER INFORMATION: Incyte ID No: 2816341CD1
139 <400> SEQUENCE: 4
140 Met Asn Asn His Val Ser Ser Lys Pro Ser Thr Met Lys Leu Lys
141   1                      5                      10                      15
142 His Thr Ile Asn Pro Ile Leu Leu Tyr Phe Ile His Phe Leu Ile
143                      20                      25                      30
144 Ser Leu Tyr Thr Ile Leu Thr Tyr Ile Pro Phe Tyr Phe Phe Ser
145                      35                      40                      45
146 Glu Ser Arg Gln Glu Lys Ser Asn Arg Ile Lys Ala Lys Pro Val
147                      50                      55                      60
148 Asn Ser Lys Pro Asp Ser Ala Tyr Arg Ser Val Asn Ser Leu Asp
149                      65                      70                      75
150 Gly Leu Ala Ser Val Leu Tyr Pro Gly Cys Asp Thr Leu Asp Lys
151                      80                      85                      90
152 Val Phe Thr Tyr Ala Lys Asn Lys Phe Lys Asn Lys Arg Leu Leu
153                      95                      100                     105
154 Gly Thr Arg Glu Val Leu Asn Glu Glu Asp Glu Val Gln Pro Asn
155                      110                     115                     120
156 Gly Lys Ile Phe Lys Lys Val Ile Leu Gly Gln Tyr Asn Trp Leu
157                      125                     130                     135
158 Ser Tyr Glu Asp Val Phe Val Arg Ala Phe Asn Phe Gly Asn Gly
159                      140                     145                     150
160 Leu Gln Met Leu Gly Gln Lys Pro Lys Thr Asn Ile Ala Ile Phe
161                      155                     160                     165
162 Cys Glu Thr Arg Ala Glu Trp Met Ile Ala Ala Gln Ala Cys Phe
163                      170                     175                     180
164 Met Tyr Asn Phe Gln Leu Val Thr Leu Tyr Ala Thr Leu Gly Gly
165                      185                     190                     195
166 Pro Ala Ile Val His Ala Leu Asn Glu Thr Glu Val Thr Asn Ile

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167		200		205		210
168	Ile Thr Ser Lys Glu Leu Leu Gln Thr	Lys Leu Lys Asp Ile Val				
169		215		220		225
170	Ser Leu Val Pro Arg Leu Arg His Ile	Ile Thr Val Asp Gly Lys				
171		230		235		240
172	Pro Pro Thr Trp Ser Glu Phe Pro Lys	Gly Ile Ile Val His Thr				
173		245		250		255
174	Met Ala Ala Val Glu Ala Leu Gly Ala	Lys Ala Ser Met Glu Asn				
175		260		265		270
176	Gln Pro His Ser Lys Pro Leu Pro Ser	Asp Ile Ala Val Ile Met				
177		275		280		285
178	Tyr Thr Ser Gly Ser Thr Gly Leu Pro	Lys Gly Val Met Ile Ser				
179		290		295		300
180	His Ser Asn Ile Ile Ala Gly Ile Thr	Gly Met Ala Glu Arg Ile				
181		305		310		315
182	Pro Glu Leu Gly Glu Glu Asp Val Tyr	Ile Gly Tyr Leu Pro Leu				
183		320		325		330
184	Ala His Val Leu Glu Leu Ser Ala Glu	Leu Val Cys Leu Ser His				
185		335		340		345
186	Gly Cys Arg Ile Gly Tyr Ser Ser Pro	Gln Thr Leu Ala Asp Gln				
187		350		355		360
188	Ser Ser Lys Ile Lys Lys Gly Ser Lys	Gly Asp Thr Ser Met Leu				
189		365		370		375
190	Lys Pro Thr Leu Met Ala Ala Val Pro	Glu Ile Met Asp Arg Ile				
191		380		385		390
192	Tyr Lys Asn Val Met Asn Lys Val Ser	Glu Met Ser Ser Phe Gln				
193		395		400		405
194	Arg Asn Leu Phe Ile Leu Ala Tyr Asn	Tyr Lys Met Glu Gln Ile				
195		410		415		420
196	Ser Lys Gly Arg Asn Thr Pro Leu Cys	Asp Ser Phe Val Phe Arg				
197		425		430		435
198	Lys Val Arg Ser Leu Leu Gly Gly Asn	Ile Arg Leu Leu Leu Cys				
199		440		445		450
200	Gly Gly Ala Pro Leu Ser Ala Thr Thr	Gln Arg Phe Met Asn Ile				
201		455		460		465
202	Cys Phe Cys Cys Pro Val Gly Gln Gly	Tyr Gly Leu Thr Glu Ser				
203		470		475		480
204	Ala Gly Ala Gly Thr Ile Ser Glu Val	Trp Asp Tyr Asn Thr Gly				
205		485		490		495
206	Arg Val Gly Ala Pro Leu Val Cys Cys	Glu Ile Lys Leu Lys Asn				
207		500		505		510
208	Trp Glu Glu Gly Gly Tyr Phe Asn Thr	Asp Lys Pro His Pro Arg				
209		515		520		525
210	Gly Glu Ile Leu Ile Gly Gly Gln Ser	Val Thr Met Gly Tyr Tyr				
211		530		535		540
212	Lys Asn Glu Ala Lys Thr Lys Ala Asp	Phe Phe Glu Asp Glu Asn				
213		545		550		555
214	Gly Gln Arg Trp Leu Cys Thr Gly Asp	Ile Gly Glu Phe Glu Pro				
215		560		565		570

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216 Asp Gly Cys Leu Lys Ile Ile Asp Arg Lys Lys Asp Leu Val Lys
217          575          580          585
218 Leu Gln Ala Gly Glu Tyr Val Ser Leu Gly Lys Val Glu Ala Ala
219          590          595          600
220 Leu Lys Asn Leu Pro Leu Val Asp Asn Ile Cys Ala Tyr Ala Asn
221          605          610          615
222 Ser Tyr His Ser Tyr Val Ile Gly Phe Val Val Pro Asn Gln Lys
223          620          625          630
224 Glu Leu Thr Glu Leu Ala Arg Lys Lys Gly Leu Lys Gly Thr Trp
225          635          640          645
226 Glu Glu Leu Cys Asn Ser Cys Glu Met Glu Asn Glu Leu Leu Lys
227          650          655          660
228 Val Leu Ser Glu Ala Ala Ile Ser Ala Ser Leu Glu Lys Phe Glu
229          665          670          675
230 Ile Leu Val Lys Ile Arg Leu Ser Pro Glu Pro Trp Thr Pro Glu
231          680          685          690
232 Thr Gly Leu Val Thr Asp Ala Phe Lys Leu Lys Arg Lys Glu Leu
233          695          700          705
234 Lys Thr His Tyr Gln Ala Asp Ile Glu Arg Met Tyr Gly Arg Lys
235          710          715          720
238 <210> SEQ ID NO: 5
239 <211> LENGTH: 456
240 <212> TYPE: PRT
241 <213> ORGANISM: Homo sapiens
243 <220> FEATURE:
244 <221> NAME/KEY: misc_feature
245 <223> OTHER INFORMATION: Incyte ID No: 3324214CD1
247 <400> SEQUENCE: 5
248 Met Phe Leu Leu Leu Thr Phe Asp Ser Leu Ile Val Asn Leu Leu
249   1          5          10          15
250 Gly Ile Ser Leu Thr Val Leu Phe Thr Leu Leu Leu Val Phe Ile
251          20          25          30
252 Ile Val Pro Ala Ile Phe Gly Val Ser Phe Gly Ile Arg Lys Leu
253          35          40          45
254 Tyr Met Lys Ser Leu Leu Lys Ile Phe Ala Trp Ala Thr Leu Arg
255          50          55          60
256 Met Glu Arg Gly Ala Lys Glu Lys Asn His Gln Leu Tyr Lys Pro
257          65          70          75
258 Tyr Thr Asn Gly Ile Ile Ala Lys Asp Pro Thr Ser Leu Glu Glu
259          80          85          90
260 Glu Ile Lys Glu Ile Arg Arg Ser Gly Ser Ser Lys Ala Leu Asp
261          95          100          105
262 Asn Thr Pro Glu Phe Glu Leu Ser Asp Ile Phe Tyr Phe Cys Arg
263          110          115          120
264 Lys Gly Met Glu Thr Ile Met Asp Asp Glu Val Thr Lys Arg Phe
265          125          130          135
266 Ser Ala Glu Glu Leu Glu Ser Trp Asn Leu Leu Ser Arg Thr Asn
267          140          145          150
268 Tyr Asn Phe Gln Tyr Ile Ser Leu Arg Leu Thr Val Leu Trp Gly

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RAW SEQUENCE LISTING ERROR SUMMARY DATE: 08/26/2002
PATENT APPLICATION: US/09/831,088A TIME: 14:36:52

Input Set : A:\pf0622usn_seqlist.txt
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Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:6; N Pos. 63

Seq#:10; N Pos. 1597,1650,1656,1713,1719,1754,1778,1791,1794,1796,1800

VERIFICATION SUMMARY

DATE: 08/26/2002

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Input Set : A:\pf0622usn_seqlist.txt

Output Set: N:\CRF3\08262002\I831088A.raw

L:17 M:270 C: Current Application Number differs, Replaced Current Application Number
L:18 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:21 M:256 W: Invalid Numeric Header Field, Wrong Prior FILING DATE:YYYY-MM-DD
L:328 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:60
L:516 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:10
L:543 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:10 after pos.:1560
L:544 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:10 after pos.:1620
L:545 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:10 after pos.:1680
L:546 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:10 after pos.:1740